

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF ARUNDEL MILLS BLVD. AND NORTHBOUND MD 295 RAMPS IN ANNE ARUNDEL COUNTY. ARUNDEL MILLS BLVD. IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE, FULLY-ACTUATED MODE WITH WESTBOUND ARUNDEL MILLS BLVD. AND THE NORTHBOUND MD 295 RAMP OPERATING CONCURRENTLY. EASTBOUND ARUNDEL MILLS BLVD. WILL OPERATE ALONE. THIS INTERSECTION WILL BE INTERCONNECTED TO THE EXISTING TRAFFIC SIGNAL AT ARUNDEL MILLS BLVD. AND MILESTONE BLVD./DORCHESTER BLVD.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE S-TYPE CONTROLLER WITH BATTERY BACKUP, SYSTEM PACKAGE AND TWO VIDEO DETECTION INTERFACE UNITS HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1019

MR. JOHN MAYES
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1013

MR. MIKE HUBER
UTILITY ENGINEER
(410) 841-1039

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MR. MIKE STOCKER
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
CHIEF - SIGNAL OPERATIONS SECTION
(410) 787-7652

PHASE CHART

	1	2	3	4	5	6	7	8	9	
	R	R	R	R	R	R	R	R	R	
	Y	Y	Y	Y	Y	Y	Y	Y	Y	
	G	G	G	G	G	G	G	G	G	
PHASE 1	R	R	R	G	G	G	G	G	G	
1 CHANGE	R	R	R	Y	Y	Y	Y	Y	Y	
PHASE 2	G	G	G	R	R	R	R	R	R	
2 CHANGE	Y	Y	Y	R	R	R	R	R	R	
FLASHING OPERATION	FLR	FLR	FLR	FLR	FLR	FLR	FLR	FLR	FLR	

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
5 CY	TEST PIT EXCAVATION
90 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
1 EA	CONTROLLER (S-TYPE WITH BATTERY BACKUP) AND CABINET WITH SYSTEM PACKAGE - BASE MOUNT
2 EA	VIDEO INTERFACE EQUIPMENT
27 EA	12 IN. LED SIGNAL HEAD SECTION
10 CY	CONCRETE FOUNDATION FOR SIGNAL
1 EA	CUT, CLEAN, GALVANIZE AND CAP MAST ARM
1 EA	20 FT. BREAKAWAY PEDESTAL POLE
1 EA	27 FT. MAST ARM POLE & 60 FT. MAST ARM
1 EA	27 FT. TWIN MAST ARM POLE & TWIN 50F/70 FT MAST ARMS
2 EA	15 FT. LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE
10 EA	ELECTRICAL HANDHOLE
20 LF	2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
40 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
650 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
185 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
6 EA	VIDEO DETECTION CAMERA AND CABLE
180 LF	WOOD SIGN SUPPORTS 4 IN. X 6 IN.
1 EA	METERED SERVICE PEDESTAL EMBEDDED
1015 LF	12-PAIR COMMUNICATION CABLE
100 LF	ELECTRICAL CABLE 1 - CONDUCTOR (NO. 4 A.W.G.) - THHN / THWN
80 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 A.W.G.)
1865 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 A.W.G.)
675 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 A.W.G.)
550 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
6 EA	3/4 IN. X 10 FT. GROUND ROD
1 EA	SHIELD ASSEMBLY (48" X 72") - POLE MOUNT
1 EA	SHIELD ASSEMBLY (30" X 51") - POLE MOUNT
2 EA	R3-5(R) (30" X 36") SIGN - MAST ARM MOUNT
5 EA	W3-3 (48" X 48") WITH "NEW" PANEL (30" X 30") - GROUND MOUNT
4 EA	R3-5(S) (30" X 36") SIGN - MAST ARM MOUNT
2 EA	R3-3 (24" X 24") SIGN - MAST ARM MOUNT
1 EA	R10-11B (24" X 24") SIGN - MAST ARM MOUNT

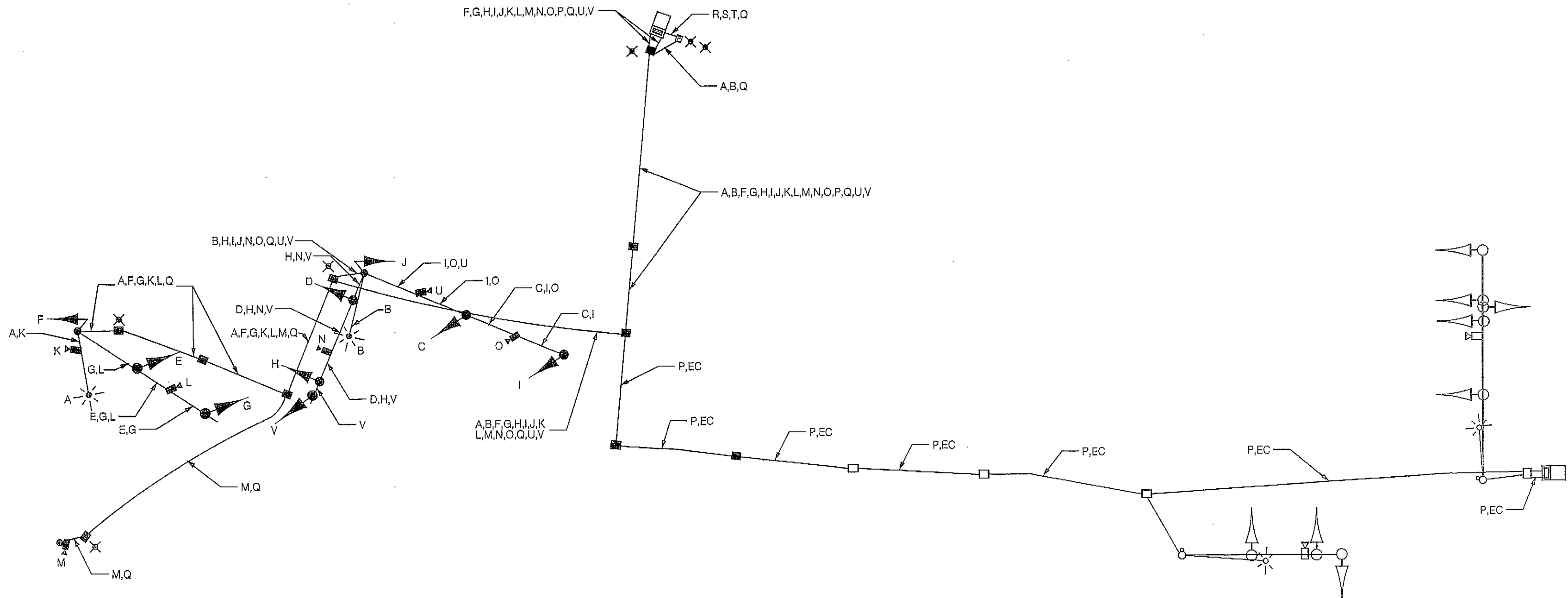
EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



WIRING KEY

A-B	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
C-E	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F-J,V	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
K-O,U	VIDEO DETECTION CABLE
P	12-PAIR VOICE GRADE INTERCONNECT CABLE
Q	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
R-T	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
EC	EXISTING CABLE
PS	PROPOSED ELECTRIC SERVICE
X	GROUND ROD
Y	METER SERVICE PEDESTAL

TRAFFIC CONCEPTS, INC.

325 Gambrills Road
Suite B
Gambrills, MD 21054
(410) 923-7101

FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

FILE PATH: Z:\2400\2475\Signals\Arundel Mills@MD 295 Ramps\2012-geo\new-signal.dgn
DATE: Wednesday, March 28, 2012 AT 03:13 PM

TRACKING NO. 11-AP-AA-024-XX

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
ARUNDEL MILLS BLVD.
AND MD 295 RAMP (NORTH)

HANOVER, MARYLAND

GENERAL INFORMATION PLAN

SCALE NONE DATE 3-22-12 CONTRACT NO. BW998M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL
DRAWN BY T. ZAYDEL LOGMILE 02F71301.49
CHECKED BY K. SCHMID T.I.M.S. NO. K-972
F.A.P. NO. NA TOD NO.

DRAWING NO. TS - 4840 G/2 SHEET NO. 3 OF 3